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WIRELESS CONSUMERS ALLIANCE INC.

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January 11, 2000

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Ms. Magalie Roman Salas  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, D.C. 20554

Re: WT Docket 99-328 (Nokia), *Ex Parte*

Dear Ms. Salas:

Under the Rules, a wireless handset operating in the analog mode and using Automatic A/B Roaming -- IR, which is unable connect a 9-1-1 call to the land line telephone system over the preferred cellular system withing 17 seconds must then attempt to place the call on the non-preferred cellular system. Nokia maintains that it wants to modify Automatic A/B Roaming -- IR to scan both the digital and analog systems. Nokia says that it would first scan the systems listed in the handset's preferred roaming list and then scan all the non-preferred systems. Nokia's proposal would *eliminate two key requirements* adopted by the Commission in approving Automatic A/B Roaming - IR: (1) that the 9-1-1 call should sequentially be attempted on the non-preferred analog system, and (2) that the handset using this methodology have the capability to determine if it is "locked in" and not connected to the landline system. Nokia reasons that the requirement to scan the non-preferred analog system in sequence should be discarded because the system selection, dictated by the handset's preferred roaming list, might be "analog X system, digital Y system." Nokia says in this instance, is not in the public interest to sequentially move from the preferred analog carrier to the non-preferred analog system because the digital system next in order on its preferred roaming list probably is "superior" to the non-preferred analog system. As we have shown, Nokia's assumptions that the digital system in this scenario is both available and "superior" to the two analog systems are implausible, to say the least, and scanning of the preferred roaming list results in a needless loss of critical time. We have also pointed out, Nokia's proposal does not even address the lock in problem, which was extensively documented and discussed in Docket 94-102. In fact, as Nokia now admits, its "proposal" contemplates making *no change* to their handsets.

By letter of December 30, 1999, Nokia has once again recast their position. Nokia now proposes the following change: "Nokia will modify its multi-mode handsets to switch to a subsequent system if the call cannot be "*completed*" within 17 seconds if the Commission

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approves its request.”<sup>1</sup> This change is offered to overcome the objection that scanning the preferred roaming list is a waste of time and to gloss over Nokia’s failure to address the lock in problem.

(1) Seventeen seconds is the maximum time a caller to 9-1-1 should wait before connection to the land line network wherever such connection is possible.

Nokia says that it will apply a 17 second time limit *per* channel accessed to “complete”<sup>2</sup> a 911 call. Saying that the Alliance does not understand how its handsets operate, Nokia says that “the handset makes a quick scan of all channels it is capable of operating on. The amount of time needed to tune the synthesizer to the channel is typically in the range of 20-30 milliseconds. Thus in a worst case, the handset will scan for 42 potential PCS channels and 4 potential 800 MHz digital channels . . . each of these scans taking a maximum of 30 milliseconds”<sup>3</sup> We *understand* enough to know that this description does not include a scan of the analog channels and describes a scan of only one 800 MHz system. We also *understand* that when a channel is found using RSSI, the Nokia handset will waste a minimum of five seconds attempting to sync with the overhead stream before discovering that the format is incompatible and moving onto the next found channel where the process is repeated. All of this easily adds up to way more than a total of 17 seconds under any number of scenarios. Our point, reduced to its essence, is that if the handset is operating in the analog mode, the chances are that an analog system is the only available preferred system in that area. Nokia’s proposal to then look for out of the area digital systems instead of switching to the other analog system is of very dubious benefit to the public. In a clear light, it can be seen as simply a contrivance to avoid compliance with the Rules.

(2) Nokia says that its “phones will be designed to combat lock-in in the same manner that the Commission has allowed for other call completion methods.”<sup>4</sup>

The above statement is simply **not true**. As noted above, in its initial application, Nokia said that its “proposed call completion method is based on the Automatic A/B Roaming – Intelligent Retry method described in the *Second Report and Order*.”<sup>5</sup> The

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<sup>1</sup> Footnote 7, Nokia letter of December 30 (“Nokia letter”). (Emphasis added).

<sup>2</sup> It is important to understand that the word “complete,” as used by Nokia, does *not* mean “connected to the land line carrier.”

<sup>3</sup> Nokia letter, page 2.

<sup>4</sup> *Id.*

<sup>5</sup> *Id.*, page 3.

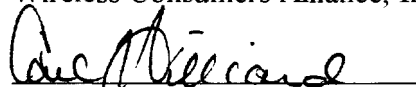
Commission very wisely approved this methodology *subject to the additional condition that* the call would be switched to the other analog system if the “preferred cellular carrier has not successfully **delivered the call to the landline carrier** within 17 seconds.”<sup>6</sup> However, the process that Nokia describes is one where the call is deemed to be “completed” when the handset receives an assignment of a voice channel or a digital traffic channel and returns a handshake signal to the base station. If that handshake signal is not received by the base station then the call is not delivered to the landline carrier and the caller is helplessly “locked in” to the system. Nokia now says that if the “system is lost” the handset will move onto the next available system. This is not a solution to lock in. In the Lechuga case the preferred system was never “lost.” Nor was the preferred system “lost” during our tests over the route followed by Marcia Spielholz. The preferred system in these cases was simply too weak to handle the call but the emergency caller was helplessly “locked in” to that system. The same problem is inherent in Nokia’s phones. Nokia has not described any methodology which its handsets will use to determine that the call has been delivered to the landline carrier. The record clearly shows that Nokia’s handsets will deem the call complete and not move to the next system in 17 seconds, or at all, despite the fact that the caller has not been connected to the 911 operator. This is “lock in.”

There is no justification for extending the February 13 deadline for Nokia’s compliance with the Rules. Both Double Push and Strongest Signal require only a few lines of code change. Automatic A/B Roaming – IR, modified to detect connection to the land line system in accordance with the *Second Report and Order*, may require more but there has been sufficient time provided to reach a solution for this methodology. Nokia’s eleventh hour proposal to make no change to its handsets on the contrived pretext that the public would benefit by use of the preferred roaming list is not grounds for any relief.

Nokia’s sham application should be denied together with its request for an extension for compliance with the Rules.

Respectfully submitted,

Wireless Consumers Alliance, Inc.



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<sup>6</sup> *Revision of the Commission’s Rules to Ensure Compatibility with Enhanced E-911 Emergency Calling Systems*, Second Report and Order, 14 FCC Rcd 10954 at paragraph 41. (“*Second Report and Order*”).

cc: **Commission**

Chairman William E. Kennard  
Commissioner Susan Ness  
Commissioner Harold Furchtgott-Roth  
Commissioner Michael K. Powell  
Commissioner Gloria Tristani

**Wireless Telecommunications Bureau**

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